



# Green Economic Development

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[www.breweryblocks.com](http://www.breweryblocks.com)



## Green Engineering

### Block 1 Retail & Office

- ❖ High-efficiency district chilled water plant
- ❖ Highly-reflective roof minimizes heat gain
- ❖ High-efficiency glazing; replacement of existing glazing with architecturally consistent system

❖ Preservation of historic façade

❖ Two floors of large floor plates for high technology users

❖ 12' ceiling heights



## Green Engineering

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### Block 2

#### Brewhouse & Office Tower

- ❖ Re-use & renovation of historic structures
- ❖ Operable windows
- ❖ Daylight controls & light shelves
- ❖ High-efficiency glazing
- ❖ Cold duct HVAC system and use of PES chiller plant
- ❖ Use of low VOC materials





## Green Engineering

### Block 3- Condominium Tower

- ❖ Use of PES chilled water on full block
- ❖ Waste heat recovery system for domestic hot water
- ❖ High-efficiency lighting throughout
- ❖ Certified wood flooring & cabinetry – wheat board cabinet cores
- ❖ Low VOC finishes & materials – 100% reclaimable, natural fiber carpet
- ❖ Energy-efficient appliances
- ❖ Proper solar orientation of building



## Green Engineering

# Block 3

## Re-development of Armory

- ❖ Historic re-use and renovation of existing Armory for Portland Center Stage
- ❖ Pursuing LEED Platinum





## Green Engineering

# Block 4

## Retail/Office Tower

- ❖ PES chiller plant & cold duct HVAC system
- ❖ High-efficiency glazing
- ❖ Operable windows, light shelves
- ❖ Daylight controls

- ❖ Building orientation – south facing terrace on 3-story podium with an eco-roof



- ❖ Photovoltaic solar panels on rooftop & facade

## Green Engineering

# Block 5 Apartment Tower

- ❖ North/South orientation
- ❖ High-efficiency glazing
- ❖ PES chilled water
- ❖ Street level retail
- ❖ High-efficiency lighting & appliances
- ❖ Low VOC finishes
- ❖ Wheat board cabinet cores





# Brewery Blocks & LEED

## Why do it?

- ▣ The only responsible thing to do!
- ▣ First LEED project – we learned as we went
- ▣ Partnered with many other green organizations (NEEA, Energy Trust, OOE, OSD) = broad support for common goal
- ▣ Extension of our corporate philosophy – Build lasting value for the community
- ▣ Lower energy costs
- ▣ Saves on construction waste
- ▣ Improved health & productivity - better indoor air quality
- ▣ Market differentiation



# Benefits

- ▣ Greater environmental and social responsibility
- ▣ Better environments, both in office spaces and in homes - tangible things people notice:
  - ▣ better indoor air quality
  - ▣ more natural light
- ▣ Control over systems – operable windows (single most desired element), task lighting, etc.
- ▣ Better employee morale/less absenteeism and higher productivity
- ▣ Driver for change in the industry



- ▣ From existing knowledge and help shape future programs (i.e. LEED core and shell pilot projects, Bonneville partnership for PVs, input on new BETC program legislation, etc.)
- ▣ Less exposure to litigation because we positioned ourselves to be proactive
- ▣ Leasing and selling at market rates in a down market



# Brewery Blocks & LEED Goals

- ▣ Educate tenants on building's sustainable measures via a Tenant Manual
- ▣ Push to incorporate energy saving measures 20 - 30 % greater than Oregon Energy Code
- ▣ Discover and integrate methods to develop and manage projects in a way that is environmentally sustainable



# Financial Resources

- ▣ Tap into all available resources, monetary and non-monetary
- ▣ Design assistance support – Northwest Energy Efficiency Alliance (daylighting lab)
- ▣ Financial assistance – State BETC, Energy Trust, City of Portland Green Investment Fund



OREGON  
DEPARTMENT OF  
ENERGY

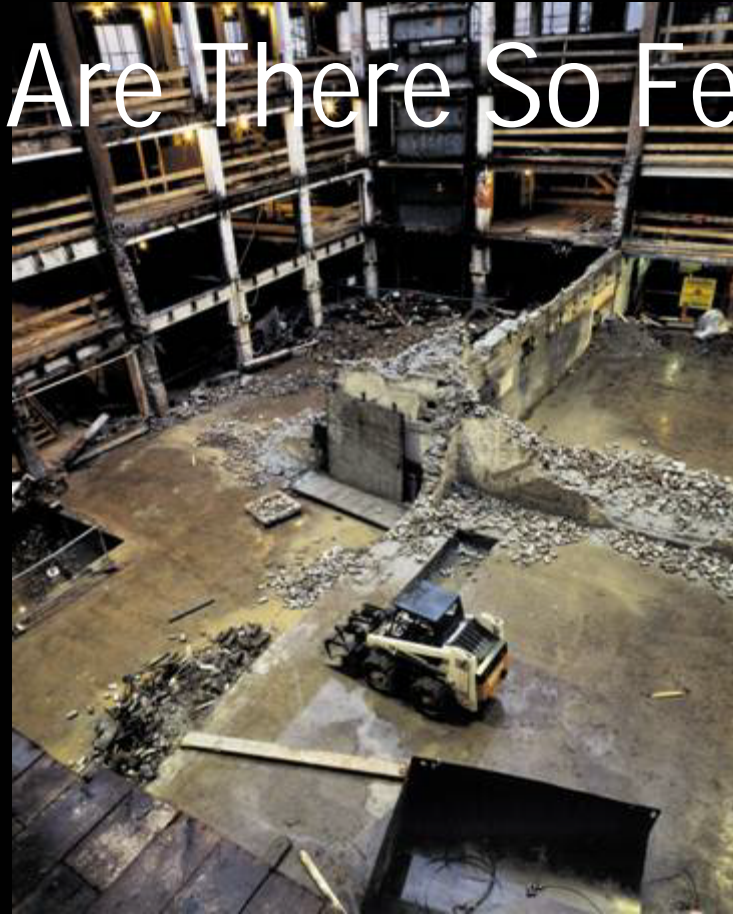


# Integrating Green into Building Process

- ☐ Eco-charette – bring experts together to identify sustainable strategies
- ☐ Integrated design approach to achieve optimal energy savings
- ☐ Possibilities vs. cost of technology
- ☐ Identify other resources (design assistance, funding/tax credits, marketing)
- ☐ Everyone gets familiar with their responsibilities throughout the project
- ☐ Better planning = better end product = happier clients, tenants, employees, residents



# Why Are There So Few of Us?



- ❑ Real estate development – already risk-prone industry
- ❑ “If it ain’t broke, don’t fix it”
- ❑ Requires commitment of senior management
- ❑ Requires in-house expertise, brain damage



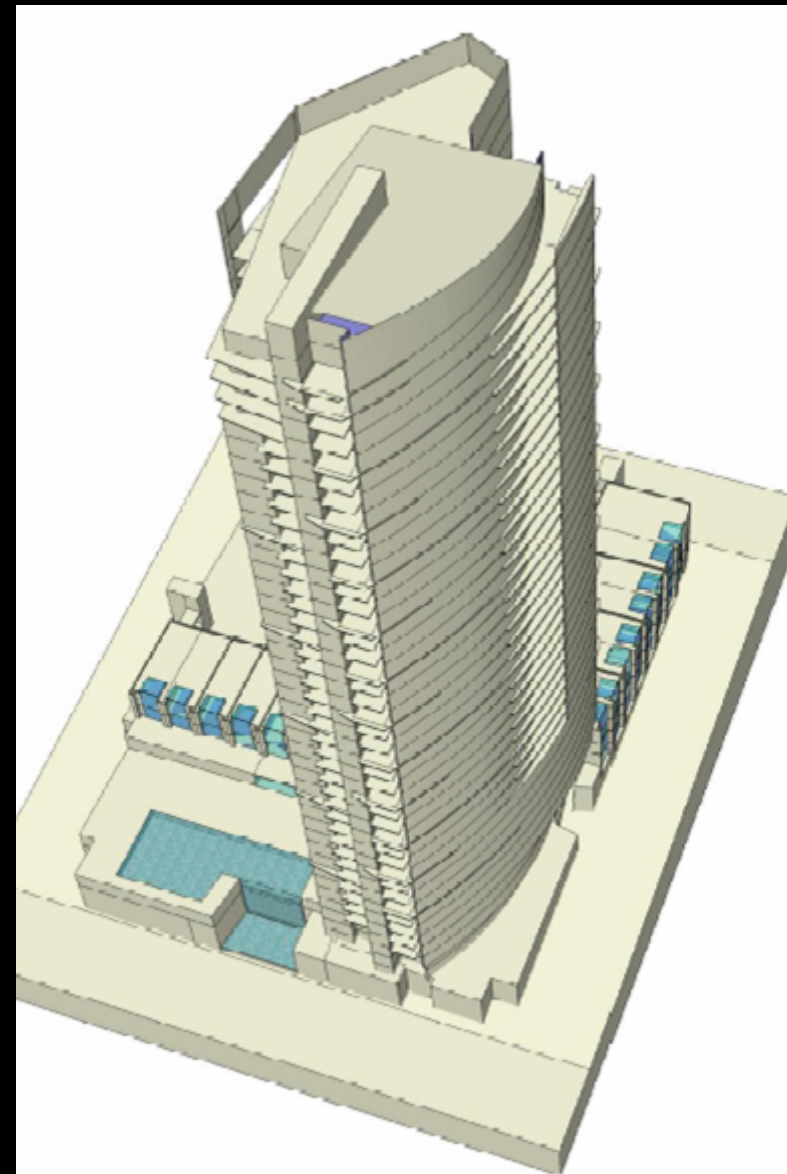
# Gerding/Edlen's Ongoing Contribution

- ☐ Continue to set aggressive goals for our projects
- ☐ Support The Natural Step and USGBC
- ☐ Share our experiences - what works and where we find there are still challenges
- ☐ Education – presentations, project tours, interviews, student case studies



# Gerding/Edlen's Bellevue Project

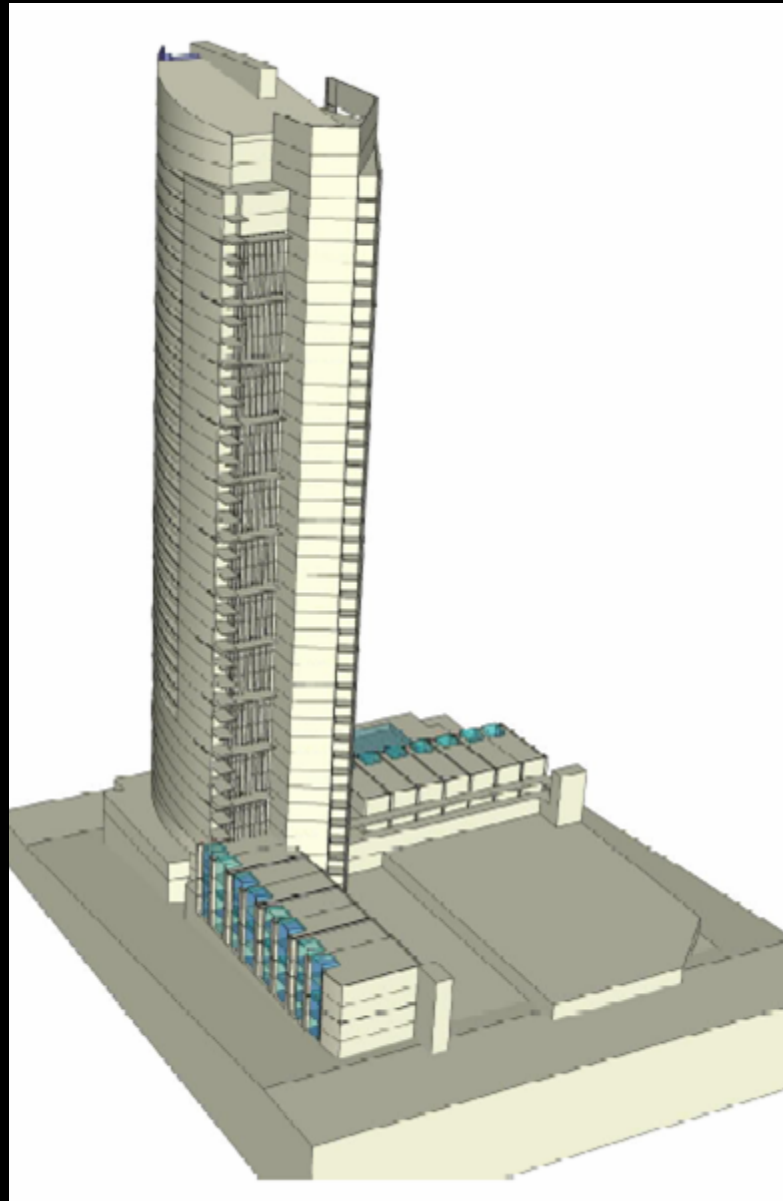
- ▣ 1 or 2 towers
- ▣ 42 stories
- ▣ Mixed-use residential building
- ▣ Anticipated LEED Gold certification



ARIAL VIEW SW



# Gerding/Edlen's Bellevue Project



The building design includes:

- ▣ Curtain wall with clear insulated spandrel glass
- ▣ Metal and stone accents
- ▣ Expected to offer buyers a new level of quality in the region

- ☐ Set green goals and objectives explicitly and early on, with participation of entire project team.
- ☐ Value simple things.
- ☐ Don't be so risk averse as to not consider new possibilities.
- ☐ **WARNING!** Embarking on a course of environmentally responsible projects will change the culture of your company.
- ☐ Encourage creativity and open-mindedness.



# Key Success Factors

- ☐ Strong visible commitment from the owner/client
- ☐ A good, serious, 'integrated design process,' where team members are really breaking out of their compartmentalized roles and collaborating strongly, is key
- ☐ Always keep in mind, and provide visibility to, the 'Why'
- ☐ Be systematic
- ☐ Hire people who are outstanding at what they do
- ☐ Have fun

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Can Old Dogs Learn New Tricks - Take Away Ideas